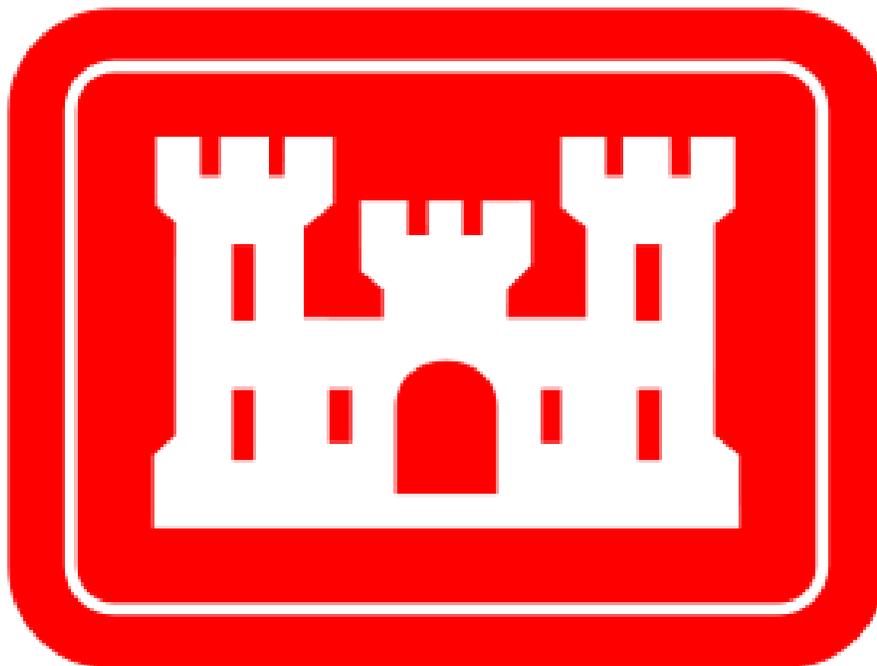


Draft Environmental Assessment
Section 594
New Wastewater Collection
And
Treatment System Improvement Project
Village of Rome, Ohio



U.S. Army Corps of Engineers
Huntington District
Huntington, West Virginia
August 2017



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Village of Rome, Ohio

Executive Summary

The Village of Rome, Ohio (Village) proposes to construct a wastewater collection and treatment system to serve its residents. Village residents are currently served by individual onsite wastewater treatment systems (septic systems), which are known to be failing and in disrepair. These failing septic systems are primarily responsible for water quality standard violations and unsanitary conditions in local surface waters including the Ohio River. The failure of these systems is attributed to age, poor construction practices and small lot sizes. These failing systems also have the potential to degrade the ground water resources of the area which could cause significant health threats to residents within the Village and surrounding areas. Both the Adams County Health Department and Ohio Environmental Protection Agency are aware of the current unsanitary conditions in the area and have notified the Village. The project is being proposed to alleviate these conditions to improve public health and safety and environmental conditions.

The Proposed Action Alternative improvements will install a Septic Tank Effluent Pump collection system comprised of approximately 8,500 linear feet of 2-inch effluent line, 47 septic tanks with electric pumps, and a wastewater treatment plant. Treatment will be accomplished using an Orenco® Packed Bed Media Filter also known as a Recirculating Media Filter. The treatment plant will be located on the northeast side of the Village, adjacent to State Route 52. Installation of the collection system will occur primarily within existing road rights-of-way and will be directionally drilled.

The proposed project is a partnership agreement between the Village of Rome and the U.S. Army Corps of Engineers (Corps) established under the authority of Section 594 of the Water Resources Development Act (WRDA) of 1999 (Public Law 106-109), as amended, which provides authority for the Corps to establish a program to provide environmental assistance to Non-Federal entities in Ohio. This law provides design and construction assistance for water related environmental infrastructure projects to Non-Federal interests in Ohio, including projects for wastewater treatment and related facilities, water supply, water storage, water treatment, water distribution facilities, and surface water resource protection and development. Funding, as established under Section 594, shall be shared 75% Federal and 25% Non-Federal (State and Local). This Environmental Assessment is prepared pursuant to the National Environmental Policy Act, Council on Environmental Quality Regulations (40 CFR 1500-1508), and Corps implementing regulation, ER 200-2-2.



SECTION 594
VILLAGE OF ROME
NEW WASTEWATER COLLECTION
AND TREATMENT SYSTEM IMPROVEMENT PROJECT
ADAMS COUNTY, OHIO

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The brief and concise nature of this document is consistent with the 40 CFR requirements of the National Environmental Policy Act (NEPA) to reduce paperwork and delay by eliminating duplication with existing environmental documentation, incorporating pertinent material by reference, and by emphasizing interagency cooperation. The majority of data collection and analysis in this document was performed by Ohio Rural Community Assistance Program (RCAP) in conjunction with the U.S. Army Corps of Engineers (Corps).

1.0 PROJECT DESCRIPTION

1.1 Project Background

This Environmental Assessment (EA) examines the potential environmental impacts of the New Wastewater Collection and Treatment System Improvement project as proposed by the Village of Rome (Village). The purpose of the EA is to analyze the potential environmental impacts of the proposed project and to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.2 Purpose, Need, and Authorization

The Village is proposing to construct a new wastewater collection system and treatment facility within the Village. The Village of Rome, Ohio (Village) proposes to construct a wastewater collection and treatment system to serve its residents. Village residents are currently served by individual onsite wastewater treatment systems (septic systems), which are known to be failing and in disrepair. These failing septic systems are primarily responsible for water quality standard violations and unsanitary conditions in local surface waters including the Ohio River. The failure of these systems is attributed to age, poor construction practices, and small lot sizes. These failing systems also have the potential to degrade the ground water resources of the area which could cause significant health threats to residents within the Village and surrounding areas. Both the Adams County Health Department and Ohio Environmental Protection Agency (OEPA) are aware of the current unsanitary conditions in the area and have notified the Village. The project is being proposed to alleviate these conditions to improve public health and safety and environmental conditions.

The proposed project is a partnership agreement between the Village of Rome and the Corps established under the authority of Section 594 of the Water Resources Development Act (WRDA) of 1999 (Public Law 106-109), as amended, which provides authority for the Corps to establish a program to provide environmental assistance to Non-Federal entities in Ohio. This law provides design and construction assistance for water related environmental infrastructure projects to Non-Federal interests in Ohio, including projects for wastewater treatment and related facilities, water supply, water storage, water treatment, water distribution facilities, and surface water resource protection and development.

This EA is prepared pursuant to NEPA, Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508), and Corps implementing regulation, ER 200-2-2.



2.0 ALTERNATIVES DISMISSED FROM FURTHER CONSIDERATION

2.1 Conventional Gravity Sewer System

In a conventional gravity sewer system, wastewater flows by gravity except where a pumping station may be required. This system, eliminates septic tanks and leaching systems and is devoid of moving parts and is generally the most reliable and economical means of conveying wastewater. This method of collection system would result in higher environmental impacts due to the greater land disturbance caused by the depth and larger diameter of sewers than other methods. With the larger environmental impacts and needs of the Village, this alternative has been dismissed from further consideration, not being the most efficient and effective alternative considered.

2.2 Septic Tank Effluent Gravity (STEG) System

The STEG system is a hybrid of the conventional gravity and the Septic Tank Effluent Pump (STEP) system. It maintains individual septic tanks at each residence and business to allow for settling of solids, then wastewater flows by gravity from the tank into the main collection line and ultimately the wastewater treatment plant. Concerns with this collection system includes issues with installation, ownership and responsibility of the individual septic tanks, and maintenance easements being obtained from individual property owners. With these concerns and elevated maintenance costs, this alternative was eliminated from further evaluation.

2.3 Low Pressure Collection System

A low pressure collection sewer system utilizes a pressurized piping system to transport wastewater, the sewage flows to a vault where a grinder pump grinds the solids and discharges the sewage into the service lines. The grinder pump station would be located on the individual users' property and may serve one or more individual households. This collection system has high-energy consumption, high operation and maintenance (O&M) costs, and is susceptible to power outages. It would have issues concerning installation, ownership and responsibility of the individual grinders, and maintenance easements must be obtained from individual property owners. With these issues, this alternative was eliminated from further evaluation.

2.4 Optimization of Existing Facilities

Optimizing operations of the existing onsite systems will do little to address the pollution and public health issues in the Village. These systems are failing due to a number of issues including age, lack of appropriate design and installation practices, and overall lack of maintenance. The systems cannot be repaired to meet current Ohio Department of Health requirements due to lack of space and poor soils. This alternative would be very costly and updating the current system



would not result in the needed wastewater treatment for the Village, this alternative was dismissed from further consideration.

2.5 Replacement of Existing Onsite Systems

Replacement of the existing systems would require off-lot discharges for each household. In order to comply with off-lot discharge requirements, each homeowner would be required to obtain an installation permit from the Department of Health and a discharge permit from the OEPA. In order to meet the discharge limits, advanced wastewater treatment systems would be required to be installed by the homeowner. Installation of these systems and associated components including disinfection can be in excess of \$20,000. With excessive costs to each homeowner of the Village this alternative was eliminated from further consideration.

2.6 Regionalization

Regionalization would be accomplished through an effluent line to another publicly owned treatment works in the area. However, there are no such facilities within a 10-mile radius of the Village, therefore this alternative was not further evaluated.

2.7 Extended Aeration Package Treatment Plant

An extended aeration package treatment system is a modified form of the activated sludge process and is used to treat small wastewater flows. A typical plant generally consists of influent screening or grinding, flow equalization basin, aeration tanks, aeration system consisting of blowers, air piping and air diffusers, final settling tanks, surface sand filters, chlorine or ultraviolet disinfection, post aeration chamber, aerated sludge holding tank, sludge dewatering beds, and an equipment and laboratory building. Along with much greater environmental impacts, other issues associated with this alternative include sludge removal and handling, high energy costs, and long term O&M costs. Based on before mentioned issues, this alternative was dismissed from further evaluation.

2.8 Sequencing Activated Sludge Batch Reactor (SABRE)

The SABRE is a special form of activated sludge treatment in which all of the treatment process takes place in the reactor tank and clarifiers are not required. This process treats wastewater in batch mode and each batch is sequenced through a series of treatment stages. The typical process follows: wastewater fills the tank, mixing with biomass that settles during the previous cycle; air is added to the tank to aid biological growth and facilitate waste reduction, mixing and aeration stop during this stage to allow solids to settle to the bottom of the tank, clarified effluent is



discharged, and sludge removal occurs as necessary. This treatment system has issues associated with sludge removal and handling, high energy costs, and long term O&M costs, thus this alternative has been dismissed from further consideration.

3.0 PROPOSED ACTIONS AND ALTERNATIVES

3.1 Proposed Action Alternative (PAA)

The PAA would construct a wastewater collection and treatment system to serve residents in the Village of Rome. The proposed improvements will install a STEP collection system comprised of approximately 8,500 linear feet of 2-inch effluent line, 47 septic tanks with electric pumps, and a wastewater treatment plant. Treatment will be accomplished using an Orenco® AX-Max packed bed media filter. The treatment plant will be located on a two acre piece of land on the northeast side of the Village, adjacent to State Route 52, and will discharge treated water into Cattail Run. Installation of the collection system will occur primarily within existing road rights of way and will be directionally drilled for the majority of the project. The wastewater treatment plant will be built in a previously disturbed agricultural field.

3.2 No Action Alternative (NAA)

Under the NAA, the Corps would not provide funding for the project. The Village does not currently have funding to upgrade their wastewater treatment method to comply with the Adams County Health Department and OEPA orders. The Village would continue to have failing wastewater treatment and continue to contaminate surrounding surface waters and have the potential to contaminate the local ground water. This alternative was considered unacceptable due to health and safety hazards for the community in the proposed project area and continued water quality impacts to the Ohio River and Cattail Run.

4.0 ENVIRONMENTAL SETTING AND CONSEQUENCES

4.1 Location

The Village of Rome is located in Adams County, Ohio along the Ohio River. The new wastewater treatment plant (WWTP) would be built adjacent to State Route 52 (SR 52) and the wastewater collection lines would run throughout the Village, along existing road ways including Upper Rome Road, Alley Street, 2nd Street, and Water Street totaling approximately one and a half miles. Project location mapping can be found in Appendix A.

4.2 Land Use

Land use in the vicinity of the PAA is rural, consisting primarily of residential properties and farm land. The proposed project would be constructed along paved public road right-of-ways and adjacent to SR 52. As a result, the collection lines and WWTP would be installed in previously



disturbed areas. After installation of the sewer collection line, existing conditions would be re-established.

There would be no impacts to land use as a result of either the PAA or NAA.

4.3 Climate

USACE must ensure that projects are planned and built to assure Climate Preparedness and Resilience. The Ohio River Basin's mid-latitude position makes it susceptible to highly variable weather throughout the year. The Basin's climate is greatly influenced by oceanic and atmospheric interactions. The Basin experiences seasonal weather patterns throughout the year, with climatic conditions typical of summer, fall, winter, and spring seasons for the Mid-Atlantic and Southeast Regions of the United States. Variability in weather tends to be greater during the late winter, spring, and fall seasons. Summers are usually characterized by warm to hot weather with periods of high humidity. Winters are typically mild, with areas at higher elevations experiencing slightly harsher winters and greater snowfall. Fall is typically the driest season, while spring is typically the wettest. This region is projected to receive more precipitation within the watershed system at a higher frequency as described in the July 2015 Ohio River Basin Climate Change Impacts and Adaptation Draft Pilot Study. In this study, an Ohio River gage at the City of Huntington was identified and used as the optimum forecast point to assess future climate change impacts. Historic data from that gage was included in the base flow analysis and future flow projections were produced for that gage point as well to determine more precipitation in the watershed is projected to occur.

The PAA would not involve any activity that could affect the environment in regard to climate change. This region is not projected to experience severe drought conditions and is instead expected to experience more precipitation in the future as larger and more intense rainfalls have become more frequent. The only above ground portion of the proposed alternative is the wastewater treatment plant and it will be out of the floodplain and built to building standards that could withstand minor flooding that may occur in the future. Therefore, will not be susceptible to any increased flooding from the higher precipitation anticipated. As a result, the condition of the PAA would not likely be influenced by future climate change. For the same reasons, there are also no impacts expected with respect to climate as a result of the NAA.

4.4 Terrestrial Habitat

The PAA would be constructed on previously disturbed areas, including the road right-of-ways; therefore, potential impacts to vegetation would be minimal and temporary. Any necessary tree clearing will be selective and only occur between November 15th and March 15th. Areas impacted by collection line and septic tank installation would be returned to pre-construction conditions upon completion of construction activities. Only short-term temporary impacts during construction are anticipated to occur. Long-term beneficial positive impacts would occur from the PAA with the reduction of sewage leakage into the ground leading to water quality improvements.

As the selection of the NAA would entail no changes to the project area, there are no impacts to terrestrial habitat anticipated as part of the NAA.



4.5 Floodplains

Executive Order 11988 requires Federal agencies to consider the potential effects of their proposed actions to floodplains. In order to determine the PAA's potential floodplain impact, the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) was reviewed (<https://www.fema.gov/floodplain-management/flood-zones>). The proposed sewer collection lines and septic tanks would be installed within the base floodplain or the area that has a 1-percent chance or greater of having a flood in any given year, having temporary impacts to the floodplain during construction, however pre-construction conditions would be restored after construction activities completed. The WWTP would be constructed outside of the 1-percent annual chance floodplain having no impact to the base floodplain.

Therefore, no impacts to floodplains are anticipated to occur from the PAA or NAA.

4.6 Prime and Unique Farmland

The Farmland Protection Policy Act (FPPA) requires Federal agencies to minimize the conversion of prime and unique farmland to non-agricultural uses. Most of the project follows road right-of-ways, and previously disturbed areas. Based upon review of the project, the Natural Resource Conservation Service (NRCS) determined that prime farmland does exist at the WWTP site. However, the Farmland Conversion Impact Rating of the site shows it is not considered to be Important Farmland per the FPPA. In addition, the amount of farmland to be converted relative to the amount of farmland available in the County is less than 1%.

Therefore, the PAA would have no impact on Prime or Unique, Statewide, or Locally important farmland (Appendix B).

However, the NAA would leave the surrounding groundwater susceptible to contamination having the potential to negatively impact surrounding Prime and Unique Farmland.

4.7 Aquatic Habitat/Water Quality

The Village is located within the Ohio River Basin Watershed. Surface water in the project area includes Cattail Run, which flows through the Village and drains into the Ohio River just west of the Village. Cattail Run is designated as warm-water habitat along with agricultural and industrial water supply. The Ohio River is designated as warm-water habitat, public water supply, and agricultural and industrial water supply. The Ohio River is listed in Section 303 (d) list of impaired waters for E.coli. The quality of these surface waters have been negatively affected by the discharge of partially and untreated sewage from failing onsite systems in the Village.

Implementation of the PAA would not result in any new discharges of a pollutant. Construction of the PAA will avoid any impacts to streams by directionally boring underneath Cattail Run, therefore under the Clean Water Act, a 404 permit is not needed for this action. The project will be required to comply with all OEPA including regulations regarding storm water discharges



associated with construction activities. general National Pollutant Discharge Elimination System (NPDES) permit is required for ground disturbance activities over one acre, therefore an NPDES permit will be obtained before any work begins. Construction of the new WWTP and collection lines would improve and protect the overall water quality in the area by preventing sewage overflow into ground and surface water. The Federal Clean Water Act requires that all municipal, industrial and commercial facilities that discharge wastewater directly from a point source into a waters of the United States must obtain a NPDES permit. The Village has obtained a preliminary NPDES point source discharge permit for the proposed WWTP, the permit is good for 5 years. Any additional permitting or coordination in regards to this must occur before the plant is operational. Best Management Practices (BMPs) would be used throughout the project.

In the long term, the implementation of the PAA is expected to have a positive impact on the aquatic habitat and water quality within the proposed project area. Implementation of the PAA would ensure the reduction of untreated sewage reaching ground water or surface water streams.

Under the NAA, aquatic impacts would continue in nearby streams and ground water due to the exposure to untreated sewage. Water quality in the project area would remain impaired and the Village would be out of compliance with the Clean Water Act, Section 401.

4.8 Wetlands

National Wetland Inventory Maps (NWI) were reviewed for the proposed project area and a site reconnaissance was conducted to determine validity of NWI Maps. NWI maps indicated that there are no wetlands in or adjacent to the project area. USACE Huntington District employees including the Environmental Analysis Section conducted an initial site reconnaissance in late 2015 which indicated one small, man-made fishing pond with a developed wetland fringe.

For the PAA, the pond and fringe wetland will be filled in for construction of the wastewater treatment plant, the isolated pond has a wetland fringe of less than 0.1 of an acre. This project has been reviewed in accordance with Section 404 of the Clean Water Act (Section 404) and Section 10 of the Rivers and Harbors Act of 1899 (Section 10). Under Section 404, the Corps regulates the discharge of dredged and/or fill material into waters of the United States, including wetlands. The pond and associated fridge wetland were determined to be jurisdictional waters of the United States. All work and fill by the PAA into waters of the U.S. is covered under Nationwide Permit (NWP) 39 Commercial and Industrial Developments. The work to be conducted meets all criteria under NWP 39, the proposed action does not meet the Ohio State standards to require an individual state water quality certification. The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity.

No impacts to wetlands are anticipated as part of the NAA.

4.9 Wild and Scenic Rivers

No designated Wild or Scenic Rivers are present within the Project Area. Therefore, no impacts to these resources are anticipated as part of the PAA or NAA.



4.10 Hazardous, Toxic, and Radioactive Waste (HTRW)

A Phase 1 HTRW Environmental Site Assessment was conducted for the Village Rome, New Wastewater Collection and Treatment System Improvement Project to identify environmental conditions and to identify the potential presence of HTRW contamination located within the project's construction work limits. Below are the following significant Phase 1 HTRW findings:

- The subject property currently consists of a vacant farm field Ohio River flood plain area. There are no structures on the subject property. Adams County and Green Township are not zoned; therefore, the land use has not been influenced by zoning rules.
- Current and past uses of the surrounding area specifically including the locations of the proposed project were determined to be utilized as residential or agricultural uses. One structure at the north eastern intersection of Main Street and 2nd Street was previously a dry good store; however it is believed this structure will not be served because it is abandoned. One other commercial facility within the service zone is the United Methodist Church; however, the church does not have sanitary facilities since the parsonage is attached to the church and the facility will be served.
- The results of this assessment have revealed no historical recognized environmental conditions associated with the subject property. There are no known recognized environmental conditions associated with the subject property; therefore, impact is non-applicable and the information obtained revealed no need for further investigation.

The Corps HTRW staff determined the Phase 1 HTRW Investigation Report is acceptable and no further HTRW action is required. Therefore, no impacts to HTRW are anticipated with the PAA. A clearance memorandum was signed by Corps HTRW staff March 3, 2016.

The NAA would not result in ground disturbing activities, and would not disturb areas of HTRW contamination; therefore, there are no HTRW impacts associated with the NAA.

4.11 Cultural Resources

A Phase I Archaeological Survey was conducted for the project area. Coordination with the Ohio State Historic Preservation Office (OSHPO) under Section 106 of the National Historic Preservation Act (NHPA) was initiated by Ohio RCAP. In a letter dated November 02, 2016, OSHPO determined that there will be no historic properties affected by the proposed undertaking and no further consultation under Section 106 of the NHPA is necessary (Appendix B).

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the Corps has made the determination that no historic properties will be affected by the PAA. Additionally, there would be no impacts associated with the NAA. Therefore Section 106 responsibilities are fulfilled for this action.

4.12 Threatened and Endangered Species



According to the U.S. Fish and Wildlife Service (USFWS), Federally listed threatened and endangered species known to reside in Adams County, Ohio include the Pink mucket mussel (*Lampsyllis abrupta*), Rayed bean mussel (*Villoa fabalis*), Fanshell mussel (*Cyprogenia stegaria*), Sheepnose mussel (*Plethobasus cyphus*), Snuffbox mussel (*Epioblasma triquetra*), Running buffalo clover (*Trifolium stoloniferum*), Northern Long-eared bat (*Myotis septentrionalis*), Indiana Bat (*Myotis sodalist*), and the Bald Eagle (*Haliaeetus leucocephalus*) (protected under the Bald and Golden Eagle Protection Act).

The proposed action will occur in previously disturbed areas, the collection sewer line installation is limited to an area in the public road right-of-way, the septic systems will be placed in maintained areas, and the WWTP will also be constructed in previously disturbed areas.

The proposed project is in the vicinity of one or more confirmed records of the Indiana bat. If tree clearing is necessary, trees greater than 3 inches dbh will be saved wherever possible and any tree clearing will be during the dormant season between November 15 and March 15. Following the seasonal tree clearing recommended from the USFWS and with the small amount of tree clearing proposed relative to the available habitat in the immediately surrounding area, should ensure that any impact to the Indiana bat or Northern Long-eared bat are insignificant.

The USACE, Huntington District has determined the proposed action may effect, not likely too adversely affect Federally listed threatened and endangered bat species. The Huntington District has also determined that the proposed action would have no effect on threatened or endangered aquatic species as no in-water work would occur. Furthermore, the proposed action would have no effect on endangered or threatened flowering plant species as work would occur in previously disturbed road right-of-ways that do not fall within these species habitat requirements.

Coordination with USFWS was completed by the Village consultant and Section 7 USFWS and USACE coordination was completed. USFWS concurred with our determination in a letter dated July 28, 2017.

No impacts to threatened or endangered species are anticipated to occur from the NAA.

4.13 Air Quality

According to U.S. Environmental Protection Agency (USEPA) website, Adams County is classified as “in attainment” (maintaining applicable standards) for all criteria pollutants. Emissions from construction equipment would occur during the construction period. Contractors would operate all equipment in accordance with local, state, and Federal regulations. The PAA is exempted by 40 CFR Part 93.153 from making a conformity determination, since estimated emissions from construction equipment would not be expected to exceed *deminimis* levels, direct emissions of a criteria pollutant, or its precursors. Any impacts would be short-term, localized, and would occur only during construction phase activities. Impacts to air quality under the PAA would be temporary and minor during construction.

No impacts to air quality are anticipated to occur as part of the NAA.



4.14 Noise

Noise associated with the PAA would be limited to that generated during construction. The noise associated with construction would be short in duration and would only occur during daylight hours. Noise is measured as Day Night average noise levels (DNL) in “A-weighted” decibels that the human ear is most sensitive to (dBA). There are no Federal standards for allowable noise levels. According to the Department of Housing and Urban Development Guidelines, DNLs below 65 dBA are normally acceptable levels of exterior noise in residential areas. The Federal Aviation Administration (FAA) denotes a DNL above 65 dBA as the level of significant noise impact. Several other agencies, including the Federal Energy Regulatory Commission, use a DNL criterion of 55 dBA as the threshold for defining noise impacts in suburban and rural residential areas. According to Dr. Paul Schomer in his 2001 Whitepaper, while there are numerous thresholds for acceptable noise in residential areas, research suggests an area’s current noise environment, which has experienced noise in the past, may reasonably expect to tolerate a level of noise about 5 dBA higher than the general guidelines. The Corps Safety and Health Requirements Manual provides criteria for temporary permissible noise exposure levels (see Table below), for consideration of hearing protection or the need to administer sound reduction controls.

Duration/day (hours)	Noise level (dBA)
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105

Construction noise would be similar to that of farm equipment and other small machinery used in the local area. A backhoe, end loader, road grader and/or vibratory roller are examples of equipment that is likely to be used during construction. Each emits noise levels around 85 dBA at 45 feet. Construction equipment would be operated during daylight hours when many residents are at work; therefore a reasonable exposure time of two hours would be expected during the time residents may be home during the day. Peak outdoor noise levels ranging from 78-90 dBA would occur during the time in which equipment is directly in front of or in proximity to homes and businesses (within 25-100 feet). A maximum noise exposure of approximately 98 dBA, for one hour could occur if equipment were within 10 feet of homes. The noise projections do not account for screening objects, such as trees, outbuildings or other objects that muffle and reduce the noise being emitted. The outdoor construction noise would be further muffled while residents are inside their homes. While the construction noise generated would be considered unacceptable according to HUD and FAA standards, these limited exposures and time intervals are still within allowable Corps safety levels. Further, they are similar to typical neighborhood noise generated by gas powered lawnmowers in the local area,



which could range from 90-95 dBA at three feet and 70-75 dBA at 100 feet. Residents being exposed to these noise levels would occur if and/or when residents are home and outdoors.

Due to daytime construction and the short and limited duration of elevated noise levels associated with the PAA, impacts from the noise to local residences would be temporary and minor. There would be no change in noise with the NAA.

4.15 Socioeconomic Conditions

Executive Order (E.O.) 12898 requires Federal actions to address environmental justice in minority populations and low-income populations. According to the U.S. Census Bureau, the 2015 population estimate for Adams County was 28,024 and does not contain significant minority populations. The 2015 census indicates Adams County is 97.3% white and has a median household income of \$35,560 compared with the median household income of \$49,429 for the State of Ohio. Individuals residing in the county below the poverty level is 21.3% compared to 14.8% statewide.

Implementation of the PAA would aid in protection of ground water and water quality in the Ohio River and Cattail Run, thereby improving the living environment for all residents. No homes or buildings would be impacted by the proposed project; therefore, the PAA meets the directive of EO 12898 by avoiding any disproportionately high adverse human health or environmental effects on minority or low income populations.

No impacts to minority or low income populations are anticipated to occur from the NAA.

4.16 Aesthetics

The project area is rural, primarily consisting of residential properties, farm land, and roads. Temporary disturbance of the local aesthetics would be anticipated during installation of the new wastewater treatment system; after construction, the excavated sites would be restored to original conditions. While the wastewater treatment plant will impact aesthetics, the rural nature of the area and the site being previously disturbed, these impacts are minimal.

Neither the PAA nor NAA would significantly impact local aesthetics.

4.17 Transportation and Traffic

The proposed new sewer lines will follow local roads within the community. Sewer lines will be placed in or adjacent to road and street rights-of-way and will be directionally drilled. Lines crossing under state highways will be directionally bored. Existing local traffic patterns in the area consist of small streets and access roads to homes. Construction of the PAA in and along existing road rights-of-way would involve some delays and potential detours in the normal traffic flow. These disturbances will be temporary and of short duration.

Prior to construction, the public would be informed about areas under construction and possible road closures or traffic delays. Construction on and near road surfaces would be in compliance



with Ohio Department of Transportation Cabinet (ODOT) guidelines. All appropriate ODOT guidelines for traffic control would be implemented and emergency access would be maintained. Impacts anticipated to occur from the PAA would be minimal and temporary in nature.

No impacts to transportation and traffic are anticipated to occur from the NAA.

4.18 Health and Safety

The PAA will involve the installation of a wastewater treatment system to serve all residence of the Village. This new system will allow for better treatment of wastewater leading to less raw sewage leakage into ground water and local surface waters. Therefore, the PAA is anticipated to have a long term beneficial impact on health and safety of the project area.

Under the NAA, current degraded and failing individual systems have potential to leak raw sewage into the ground water and adjacent surface waters which would continue; perpetuating current health and safety concerns.

4.19 Cumulative Effects

The Corps must consider the cumulative effects of the proposed project on the environment as stipulated in the NEPA. Cumulative effects are "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or Non-Federal) or person undertakes such actions". Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR Part 1508.7 Council on Environmental Quality [CEQ] Regulations).

The cumulative effects analysis is based on the potential effects of the proposed project when added to similar impacts from other projects in the region. An inherent part of the cumulative effects analysis is the uncertainty surrounding actions that have not yet been fully developed. The CEQ regulations provide for the inclusion of uncertainties in the analysis and states that "when an agency is evaluating reasonably foreseeable significant adverse effects on the human environment...and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking" (40 CFR 1502.22).

Temporal and geographical limits for this project must be established in order to frame the analysis. These limits can vary by the resources that are affected. The construction of a separate wastewater treatment system would have minimal and insignificant negative impacts on the environment. Long term beneficial effects will result from the project and would include health, safety, and water quality. The temporal limits for assessment of this impact would initiate in 1972 with the passage of the Clean Water Act and end 50 years after completion of this project. The geographical extent would be broadened to consider effects beyond the PAA. Cattail Run flowing through the project area, empties into Stout Run, therefore the geographical extent considered is the Stout Run Watershed and the Ohio River Basin.



The Stout Run Watershed is listed on Ohio’s 2012 Section 303(d) list of impaired waters where it is rated as impaired for aquatic life use from sedimentation and siltation. Stout Run is a tributary of the Ohio River. The Ohio River is also listed in Section 303 (d) list of impaired waters for E.coli. In 2016, OEPA conducted biological and water quality surveys of selected tributaries to the Ohio River including Stout Run. These surveys helped identify biological, chemical, and physical environmental information to support the basin approach for NPDES permitting. The Ohio River Foundation (ORF) supports the Ohio River Basin as the foundations purpose is to “protect and restore water quality and ecology of the Ohio River and its tributaries”. The ORF is currently engaged in conservation and education activities along with working with partners such as local communities to develop comprehensive restoration plans. At this time no actions are foreseen by the ORF in this area. Impairment of the Ohio River Basin is expected to continue but if the proposed action is implemented, a cleaner, healthier watershed would be promoted.

Section 4.0 documents the existing environment and potential environmental effects of the PAA and NAA with respect to existing conditions. The effects of the PAA, as discussed beforehand, are localized and minor. Past actions that may result in similar effects may include upgrading of other wastewater utilities in the watershed. No reasonably foreseeable future actions that would have similar impacts as the proposed action were identified. In scoping cumulative effects issues, no resources were identified as having a potential to be significantly affected. Only minor and temporary negative impacts to ecological resources would be sustained with the implementation of the PAA. These resources would be reestablished upon completion of construction.

The availability of Federal funds through programs, such as the 594 Program, to assist communities with installation and construction of water-related environmental infrastructure and resource protection and development projects in Ohio is an additional benefit to the area. The significance of this action on health, safety, and water quality would be positive. Given the current program is in place for the foreseeable future and the overall beneficial effect from implementation of the PAA, there is expected to be a positive, though small, cumulative effect on health and safety based on past, present, and reasonably foreseeable actions.

4.0 Status of Environmental Compliance

The PAA is in full compliance with all local, state, and Federal statutes as well as Executive Orders. Compliance is documented below in Table 2.

Table 2 - Environmental Compliance Status			
Statute/Executive Order	Full	Partial	N/A
National Environmental Policy Act (considered partial until the FONSI is signed)		X	
Fish and Wildlife Coordination Act	X		
Endangered Species Act	X		
Clean Water Act	X		
Wild and Scenic Rivers Act	X		
Clean Air Act	X		



National Historic Preservation Act	X		
Archeological Resources Protection Act			N/A
Comprehensive, Environmental Response, Compensation and Liability Act	X		
Resource Conservation and Recovery Act	X		
Toxic Substances Control Act	X		
Quiet Communities Act	X		
Farmland Protection Act	X		
Executive Order 11988 Floodplain Management	X		
Executive Order 11990 Protection of Wetlands	X		
Executive Order 12898 Environmental Justice in Minority Populations and Low-Income Populations	X		

5.0 REQUIRED COORDINATION

5.1 Agencies Contacted

Coordination with the NRCS, OEPA, USFWS, Ohio Department of Natural Resources, and OSPHO was completed prior to publication of the EA. Agency correspondence is included in Appendix B.

5.2 Public Review and Comments

The EA and FONSI will be made available for public review and comment for a period of 30 days, as required under NEPA. A Notice of Availability was published in the local newspaper, The Peoples Defender, advising the public of this document's availability for review and comment. A copy of the EA was also placed in the West Union Public Library and was made available on-line at <http://www.lrh.Corps.army.mil/Missions/PublicReview.aspx>. The mailing list for the EA is located in Appendix C.

6.0 CONCLUSION

The Village is currently not in compliance with Section 401 of the Clean Water Act as the Village residents are currently served by individual onsite wastewater treatment systems (septic systems), which are known to be failing and in disrepair. These failing septic systems are primarily responsible for water quality standard violations and unsanitary conditions in local surface waters including the Ohio River. The proposed project would assist the Village with installation of sewer lines and septic tanks along with construction of a wastewater treatment plant to help adequately treat wastewater in the Village. Raw sewage would no longer be able to enter the ground water and adjacent surface waters. No significant adverse impacts have been identified as a result of implementation of the proposed new wastewater collection and treatment system improvements.

Construction would take place on previously disturbed land. A general NPDES permit is required for ground disturbing activities during construction, a NPDES permit will be obtained before any work begins. The Federal Clean Water Act requires that all municipal, industrial and



commercial facilities that discharge wastewater directly from a point source into a waters of the United States must obtain a NPDES permit. The Village has obtained a preliminary NPDES point source discharge permit for the proposed WWTP, the permit is good for 5 years. Any additional permitting or coordination in regards to this must occur before the plant is operational. Health and safety benefits would be realized immediately with project implementation. Effects associated with construction would be minor and temporary. BMPs would be implemented during construction to minimize impacts to residents and the environment. Therefore, the PAA would not be expected to have significant negative impacts on the human environment.